



21st **Annual**
National
Scientific
Conference
of

The Nigeria Association of Pharmacists in Academia

TAGGED

“Harmony 2023”

14 - 18 AUGUST 2023

BOOK *of*
ABSTRACTS

REMARKS FROM THE NATIONAL CHAIRMAN

Dear Participants,

The 21st Scientific Conference of the Nigeria Association of Pharmacists in Academia is here.

This Book of Abstract is one of the salient contributions of this conference to the world. In it you see works that show the beauty of science in its progressive manners. Scholars all over the world have contributed in all fields of Pharmacy and her related disciplines.

One of the beauty of the works here are the diversities of the authors. Here you have contributions by highly experienced international scholars, emerging academic scholars and students.

If you want to know the direction in which science is going in the fields of Pharmaceutical Sciences and health care and the contributions of the Nigeria Pharmacists in Academia to these, you may wish to take a look and read through. Here you have cutting edge research and contributions to knowledge in Pharmacognosy, Pharmaceutical Chemistry, Pharmacology, Pharmaceutics, Pharmaceutical Microbiology, Clinical Pharmacy, Pharmacy Practice, Industrial Pharmacy with applications in Community Pharmacy, Hospital Pharmacy Practice, Pharmacy Management and other healthcare related disciplines.

We thank the Head of the Scientific sub-Committee and his team for the work well-done. We appreciate all our numerous reviewers and editors.

We appreciate all those who submitted their works for review and inclusion in this edition of the book of Abstract. We also thank all participants in the Conference where the works were presented and our Conference hosts. Lastly, we thank all readers for making this worthwhile.

Thank you,

Ezekiel Olugbenga AKINKUNMI
09/08/2023

HARMONY 2023

14-18 AUGUST

SCIENTIFIC SUB-COMMITTEE

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Bioequivalence Assay of Different Brands of Ciprofloxacin

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Background and Objectives:

Ciprofloxacin is among the three most popularly prescribed antibiotics in Nigeria with plethora of brands and branded generics, some of which are of questionable integrity. This study determined the level of pharmaceutical equivalence and by inference the bioequivalence of different commercial brands of ciprofloxacin tablets marketed in Karu area of Nasarawa State.

Methods: An innovator brand and five others of ciprofloxacin hydrochloride 500mg tablets were subjected to different assays by means of UV-Vis, HPLC analysis and anti-microbial screening.

Results: The results of the UV-Vis analysis showed highest peak of absorbance (0.49528), at 276nm for brand A, and 280nm for brands B, C, D, E, and F. The HPLC study indicated the retention time for brands A, B, and C as 1.781 minutes, and brand D, E, and F as 1.782 minutes.

All the brands passed UV-Vis and HPLC analysis which is in line with the pure ciprofloxacin used as standard. Brand B exhibited the lowest efficacy against different strains of bacteria with 102 and 195 bacteria colonies at 3.125mg/ml, and 1.5625mg/ml concentrations compared to brand C, D, E and F with bacteria colonies in the range of 2 and, 8 to 6 and 21 at 3.125 mg/ml, and 1.5625 mg/ml respectively.

Conclusion and recommendations:

The different brands of ciprofloxacin showed high level of pharmaceutical equivalence. The antimicrobial activity of brand B was grossly suboptimal and not acceptable. Quality assessment of ciprofloxacin may be essential to recommending the brands in therapeutic interventions.

Keywords: Ciprofloxacin, HPLC, Antimicrobial test, UV-Vis analysis